

G1 wherein X₁ and X₃ may be the same or different and each is an amino acid sequence consisting of from 0 to 40 naturally occurring amino acid residues; X₂ is any amino acid sequence of from 10 to 15 residues derived from or contiguous within amino acids 506 to 518 inclusive of human GAD65 or amino acids 24 to 36 inclusive of human proinsulin; and wherein said peptide is capable of reacting with T cells and modifying T-cell function when incubated with cells from subjects with pre-clinical or clinical Insulin-Dependent Diabetes Mellitus (IDDM).

40. (Amended) A recombinant or synthetic peptide consisting of the sequence:

X₁ X₂ X₃

P2 wherein X₁ and X₃ may be the same or different and each is an amino acid sequence consisting of from 0 to 40 naturally occurring amino acid residues; X₂ is selected from FFYTPKTRREAED (SEQ ID NO:1) and FWYIPPSLRTLED (SEQ ID NO:2) and wherein said peptide is capable of reacting with T cells and modifying T-cell function when incubated with cells from subjects having pre-clinical or clinical IDDM.

42. (Amended) A method of treatment comprising administering to a subject an effective amount of a peptide for a time and under conditions sufficient to remove or substantially reduce the presence in said subject of autoreactive T-cells or autoantibodies to IDDM autoantigens wherein the peptide consists of the formula:

X₁ X₂ X₃